

AMENDMENTS TO THE CLAIMS:

Claims 1-16 (Cancelled)

17. (New) A pressurizing arrangement in a mammography equipment piece that is configured to provide a well defined and comfortable positioning and fixation of a human breast of an examined person and wherein the mammography equipment piece includes an x-ray source and an examination area for the breast, as well as an upper and a lower compression plate, said pressurizing arrangement comprises:

an essentially elastic container constructed of an x-ray permeable material and configured to be located within the examination area between the upper and lower compression plates, said elastic container comprising an inlet for receiving a medium which expands the container and presses the breast against an oppositely positioned compression plate, and said container being arranged to expand into an inclined configuration having a lower and a higher section, said lower section being closest to the body of the person during examination.

18. (New) A pressurizing arrangement as recited in claim 17, wherein a contact surface between said container and the breast exhibits a receiving space such that a compression force is essentially uniformly distributed on the breast.

19. (New) A pressurizing arrangement as recited in claim 17, wherein the container forms a pillow positioned on the lower compression plate in the examination area.

20. (New) A pressurizing arrangement as recited in claim 17, wherein a contact surface of the container substantially surrounds the breast.

21. (New) A pressurizing arrangement as recited in claim 20, wherein container is made from one of (1) a fabric material, (2) a polymer material and (3) a rubber material.

22. (New) A pressurizing arrangement as recited in claim 17, wherein the medium which expands the container is gaseous.

23. (New) A pressurizing arrangement as recited in claim 22, wherein the medium which expands the container is air.

24. (New) A pressurizing arrangement as recited in claim 17, wherein the medium is one of (1) a fluid and (2) a solid medium composed of small particulate.

25. (New) A pressurizing arrangement as recited in claim 24, wherein the medium is water.

26. (New) A pressurizing arrangement as recited in claim 17, further comprising:

conduits attached to the container for conveying medium to at least one inlet and from at least one outlet of the container.

27. (New) A pressurizing arrangement as recited in 26, wherein said at least one inlet of the container is attached to a controllable medium compressor.

28. (New) A pressurizing arrangement as recited in 27, wherein said outlet accommodates evacuation of medium from the container.

29. (New) A pressurizing arrangement as recited in 27, further comprising:

a measuring and control apparatus configured control the compression force exerted on the breast based on measured pressure in the container.

30. (New) A pressurizing arrangement as recited in 17, further comprising:

a display unit for displaying the measured pressure inside the container.

31. (New) A pressurizing arrangement as recited in 17, wherein the container is filled with a temperature-adjusted medium tailored for the examined person's comfort.

32. (New) A breast compression device configured to be installed upon a support arrangement within a human breast-receiving space of a piece of mammography equipment at a location within the space adjacent to a breast projection opening into the space, said breast compression device comprising:

a compression surface configured for abutting engagement with a human breast while an x-ray image is taken, said breast compression surface having an actuated and an unactuated configuration relative to the support arrangement and said compression surface being inclined with respect to the support arrangement in the actuated configuration thereby providing a greater breast-receiving space for the base of a breast than the distal end of the breast.

33. (New) A breast compression device as recited in 32, wherein said breast compression device is configured to lay upon a lower compression plate of the piece of mammography equipment at a location within the breast-receiving space.

34. (New) A breast compression device as recited in 32, wherein said breast compression surface is configured to abut a majority of the human breast while an x-ray image is taken.

35. (New) A method for reducing patient discomfort during an x-ray mammography examination in an x-ray apparatus by providing a well defined and comfortable positioning and fixation of the breast, the method comprising:

arranging the breast on an essentially elastic container consisting of an x-ray permeable material, arranged in an x-ray exposure area; and

supplying said container with a medium that expands said container and thereby causes the container to assume an inclined shape whereby the breast is positioned, fixed in place and pressurized.